

### KEY POINTS OF THE PROPOSAL

1. Background in Analysis of
  - (a) Scattering by boundary layer
  - (b) Refraction by shock waves
  - (c) Shock cone effect on resolution
  - (d) Loss in resolution  $\tau$  (temperature differential) for windows of various thicknesses
  - (e) Glass fracture to thermal shock
  - (f) Flush window problems heating and cooling
  - (g) Recessed window problems heating and cooling
  - (h) Automatic focussing performance
  - (i) Film resolutions
  - (j) Lens plus film resolutions
  - (k) IMC degradations
2. Integration of these degrading factors into design performance considerations.
3. High intelligence yield from the basic tracking - reconnaissance equipment based on a tested design for 100,000 ft. operations  
[REDACTED] - 25X1D
4. The introduction of stereo enhancement by convergent photography.
5. Subsequent growth to a high resolution medium scale (36") reconnaissance package providing stereo enhancement.
  - a - frame
  - b - panoramic
6. Growth potential of the system to provide adaptation to cartographic application.
7. Growth potential, based on unique experience in production of the largest scale and most operationally reliable spotting systems toward extreme scale spotting equipment.

**8. System Intergration**

- (a) Direct tie of recordings to the initial navigation time base.
- (b) Pilot-vehicle-sensor interrelationship
  - (1) Presentation to pilot of route chart with target sites indicated
  - (2) Presentation to pilot of direct comparison view of terrain with camera coverage indicated.
  - (3) Presentation to pilot of equipment operational check.
    - a. Auto focus setting operation with mechanical override.
    - b. Sweep operation
    - c. Film advance operation
    - d. Etc.

**9. Computability of data collection systems products with data reduction techniques and equipments.**

**10. Automatic Focussing**

**11. Separate and secure organization and facility to perform the task.**

**12. Field testing and field servicing.**

**13. Overriding theme for maximizing intelligence yield. (Quality - reliability - security).**